

FINDING OF NO SIGNIFICANT IMPACT/ DECISION RECORD

West Overflow Wetlands ACEC Salt Cedar Control Project

EA No. NM-060-2003-010

FINDING OF NO SIGNIFICANT IMPACT: Based on the analysis of potential environmental impacts contained in the attached environmental assessment, I have determined the proposed action is not expected to have significant impacts on the environment and that preparation of an Environmental Impact Statement is not warranted.

DECISION: It is my decision to authorize the extrication and subsequent herbicide treatment of salt cedar to improve the ecological condition of the riparian community on a portion of the Pecos River within the Overflow Wetlands ACEC. A total of 50 acres of public land infested with salt cedar will be treated as part of this project. Location of the project is as follows (refer to the map in the Environmental Assessment):

T. 12 S., R. 26 E.

Portions of Section 17 & 20

Actual salt cedar mechanical removal will be done by BLM contract. Herbicide treatments and prescribed fire will be conducted by the BLM. The surface protection procedures set forth in the proposed action have been incorporated into the Environmental Assessment. Any comments made to this proposed action were considered and addressed.

Rationale for Recommendations: The decision to authorize the proposed action does not result in any undue or unnecessary environmental degradation. The action is consistent with planned actions presented in the Roswell Resource Management Plan and Record of Decision, October 1997.

In accordance with 43 Code of Federal Regulations, Part 4100, Sec 4160.2 any applicant, permittee, lessee or other affected interests may protest this proposed decision in person or in writing to the authorized officer, within 15 days after receipt of this decision. Please be specific in your points of protest. In the absence of a protest, this proposed decision will become the final decision without further notice. Any person who is adversely affected by a final decision of the authorized officer may file a written appeal to the Final Decision for the purpose of a hearing before an administrative law judge under 43 CFR 4.470. A period of 30 days after the decision becomes final is provided in which to file an appeal and a petition for stay of the decision in this office (43 CFR §4160.3 [c] and §4160.4).

/s/ T R Kreager

T. R. Kreager

Assistant Field Office Manager - Resources

11/14/02

Date

Environmental Analysis

West Overflow Wetlands ACEC Salt Cedar Control Project
NM-060-2003-010

Location:

Township 12 South, Range 26 East
Portions of Section 17 & 20

October 17, 2002

Bureau of Land Management
Roswell Field Office
Roswell, New Mexico

I. INTRODUCTION

A. General Information

The area of analysis is located within the BLM-designated Overflow Wetlands Area of Critical Environmental Concern (ACEC). The project is located in Chaves County about 16 miles east of Roswell and south of Bottomless Lakes State Park. The specific project area is located in the southwest area of the ACEC, along the west side of the Pecos River and a few upland areas. The proposed project is on lands recently acquired by the BLM for the protection and management of the ACEC (Hays Acquisition FY2001). The proposed treatment areas include riparian habitat along the Pecos River and alkali sacaton grassland on the adjacent uplands. Historical use of the subject lands have been limited to livestock grazing and recreation by the previous private landowner.

This project is planned for completion in Fiscal Year 2003 with the Clean Water Action Plan Funds obligated in Fiscal Year 2002.

B. Need For the Proposed Action

The need for the proposed action is to improve riparian condition along the Pecos River by removing salt cedar growing in a dense band along the west bank and floodplain of the river, and to improve upland conditions within the grassland community type. Both actions would contribute to improving watershed conditions along the Pecos River. Salt cedar has increased to the extent that it has taken over much of the immediate floodplain of the river, and has begun invading adjacent upland grassland habitat. There is the potential for salt cedar to proliferate throughout more of the grassland community and control is needed to remove salt cedar before it's density increases and control more expensive. Clearing salt cedar would allow for the development of open water habitat along the Pecos and would allow the channel to seek equilibrium through increasing sinuosity. Salt cedar has effectively stabilized the channel and is partly the cause of incision by limiting flows to the channel. The main cause for incision lies with river water management through controlled flows at dams for flood control and irrigation purposes. Salt cedar removal would also contribute to the availability of surface and groundwater resources in the long term.

C. Conformance with Land Use Plans: The proposed activity is addressed as part of the Roswell Resource Management Plan (October 1997).

D. Relationship to Statues, Regulations, or Other Plans: The proposal to implement a vegetation treatment on salt cedar is consistent with the New Mexico Record of Decision dated July 1991, for the *Vegetation Treatment on BLM Lands in Thirteen States*, Final Environmental Impact Statement of May 1991.

II. PROPOSED ACTION AND ALTERNATIVES

A. Proposed Action

The proposed action is to mechanically remove salt cedar growing on public land in a dense band along the west bank and floodplain of Pecos River and to remove salt cedar growing singly or in clumps on the adjacent grassland community type, all within the Overflow Wetlands ACEC (see map). Access to the area would be via Highway 285 South to the Highway 2 cutoff to Dexter, Darby Road to Lincoln Road, and then Tutelo Road which dead ends at private residences. Legal access/easement to the property is from Tutelo Road through a locked gate. The Komatsu excavator would be off-loaded from the transport at the easement and walked to the site requiring clearing. Salt cedar removal would occur between October and December. It is expected that four to five days would be required to clear the majority of salt cedar from the project area.

In addition, an earthen tank would be cleared of burned over salt cedar and re-sprouts by mechanical methods using a front end loader or small dozer. This is general maintenance of an existing structure and is disclosed for informational purposes. The area behind the berm encompasses about 10 acres of land. Material would be stacked and burned.

About one mile of fence line comprised of old barbed wire fence, electric fence wire, wooden and steel fence posts, wire stays, deadmen, and gates would be removed along the west side of the Pecos River. This would be done prior to salt cedar removal to ensure a clean project without having to deal with a tangle of salt cedar and wire. Old fence materials would be stacked and hauled off at a later date.

A 23-ton Komatsu excavator with a special bucket (patent applied for) would be used to extract the plants from the soil with as much root mass intact as possible and without much soil attached to the root system. The tread width of each track is about 31 inches exerting about 5 pounds per square inch to the ground surface. The overall width of the crawler is about ten feet. Gradual turns would be made with both tracks versus braking one side as with bulldozing which churns up the soil surface. Associated equipment includes fuel trailer, personal vehicle for operator, and transport.

The special bucket is an open-ended backhoe bucket with a v-notch and hydraulic “thumbs” on a boom with a 30-foot reach. Typically, a side grab of the plant is made with the bucket in order to grasp the bulk of the plant at the point where most stems are closest together above ground. The plant is then extricated with an upward motion with most large roots intact and without disturbing much soil as with digging the plant out with a bulldozer. On other plants, the bucket is dropped directly in the middle of the plant and extricated. Some very large plants may require additional pulling. This method allows the root “bulb” to be extracted in one piece and much of the root system is intact. A swing is made with the extracted plant piled or windrowed to one side of the excavator. In “doghair” stands (many little salt cedar plants), the area is grubbed with the open-ended bucket. Plants are uprooted and most of the soil passes through the bucket and falls back in place.

It is expected that only one pass would be required through a treatment area with extricated salt cedar either piled or windrowed away from the bank. In one area where

the bank is steep, salt cedar would be placed on top of the cut bank to remove it from the channel. In another area where the floodplain widens, salt cedar would be piled or windrowed within the floodplain but away from the bank. On the uplands, salt cedar would be pulled and dropped in place since trees and clumps are scattered. Movement to individual trees would be planned to minimize travel distance and surface disturbance by the tracked excavator.

Salt cedar piles and windrows would be kept relatively small for future burning with low fire intensity, and to allow for accessibility by BLM fire personnel (engines, hose lays, etc.) during the burning operation. Some pushing of extricated salt cedar with heavy equipment (e.g., front end loader) into piles may be required, depending on the density of salt cedar and needs of BLM hazardous fuels reduction specialist to conduct a clean burn.

Subsequent treatment with an approved herbicide may be needed within the general project area. Follow-up control of potential resprouts would be conducted during the next growing season, if needed. Re-sprouts would be treated by mechanical application of an approved herbicide using backpack sprayers, or all terrain vehicle-mounted sprayer either by the BLM or under contract.

At a later date, piles and windrows would be burned to remove dead vegetation. The burns would be conducted between February 1 to April 15. The purpose for this time frame include; (1) the availability of firing and holding resources, (2) relatively low fire activity period, and (3) seasonal weather conditions that would be favorable to achieve the desired objectives. The specifics of the prescribed fire would be outlined in the necessary Burn Plan. The goal of the project is to eliminate salt cedar for the long term within the project area and improve the density of native grasses.

B. Alternatives

No Action - This alternative would leave salt cedar as it is now.

C. Alternatives Considered but Not Analyzed

The alternative of grubbing salt cedar with a bulldozer along the Pecos River was considered but not further analyzed. The physical disturbance of mechanical control with bulldozers over about 35 acres would be more damaging to resources. This alternative will not be given further consideration in this report; fewer environmental impacts would result from the action as proposed.

III. AFFECTED ENVIRONMENT

A. General Setting

The proposed project is located within the Overflow Wetlands ACEC on lands acquired by the BLM in the southwest area of the ACEC (see map). The ACEC is comprised of a 900- acre naturally occurring wetland habitat supplied by waters that overflow from Lea Lake at the Bottomless Lakes State Park, and upland sites that include the escarpment to the east and bottomlands along the Pecos River. The Pecos River runs along the west side of the ACEC. Private land parcels were acquired by the BLM in this

portion of the ACEC for enhanced protection and management of the area. The proposed project uses the only legal access to the west side of the ACEC acquired along with a 200-acre parcel. In this area, much of the surrounding lands are developed private inholdings to the north, west and south of the project area. Upland habitat is primarily alkali sacaton grasslands ending abruptly at the Pecos River as steep banks, or grading into a wide sandy, infrequently flooded floodplain.

The climate of the area is generally classified as semi-arid with an average growing season of 195 days (April to October). During the growing season, the daily temperatures average from 55 to 80 degrees Fahrenheit (F). There are frequent highs of 100 degrees F. or more during the summer. Minimum winter temperatures occasionally drop below 0 degrees F. The average annual temperature is 61 degrees F. High winds from the west and southwest are common from March to June.

Annual precipitation averages 8 to 12 inches a year. Wide fluctuations from year to year are common, ranging from a low of about two inches to a high of over twenty inches. Eighty percent of the annual precipitation occurs in the form of rainfall during the months of June through September. Snowfall averages less than four inches annually and may occur from November through April, and usually melts within a short time.

B. Affected Resources

The following resources or values are not present or would not be affected: Prime/Unique Farmland, Minority/Low Income Populations, Wild and Scenic Rivers, Hazardous/Solid Wastes, Native American Religious Concerns. Cultural inventory surveys would continue to be required for federal actions involving surface disturbing activities. The impact of the proposed action and alternatives to minority or low-income populations or communities has been considered and no significant impact is anticipated. A cultural clearance was completed for the project on _____, no artifacts or other cultural sites were found.

1. Range: The public land in the project area is not designated as a BLM grazing allotment. No legal livestock grazing is authorized. Some trespass occurs due to deteriorated fences allowing livestock entry onto the public lands in this area of the ACEC.

2. Vegetation/Riparian: The ACEC is primarily within the riparian-wetland vegetative community as identified in the Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS). Vegetative communities managed by the Roswell Field Office are identified and explained in the RMP/EIS. Appendix 11 of the draft RMP/EIS describes the Desired Plant Community (DPC) concept and describes the components of each community.

The dominant ecological (range) site along the majority of the Pecos River within the project area is Bottomland SD-3. Range site descriptions are available for review at the Roswell BLM office or any Natural Resources Conservation Service office. Plant species present include salt cedar, baccharis, inland saltgrass, common reed, alkali sacaton, kochia, and common sunflower. Uplands are mostly comprised of alkali sacaton grasslands on a Salt Meadow or Salty Bottomland SD-3 ecological range site.

Noxious Weeds - There are no known populations of invasive or noxious weed species in the Overflow Wetlands ACEC. However, salt cedar is listed by the State of New Mexico as a Class C weed, and populations of goldenrod, a species of concern. Species of concern are native plants that may be toxic to livestock. For both species, it's BLM's policy is to limit the spread of such species as much as possible.

Infestations of noxious weeds can have a disastrous impact on biodiversity and natural ecosystems. Noxious weeds affect native plant species by out-competing native vegetation for light, water and soil nutrients. Noxious weeds cause estimated losses to producers \$2 to \$3 billion annually. These losses are attributed to: (1) Decreased quality of agricultural products due to high levels of competition from noxious weeds; (2) decreased quantity of agricultural products due to noxious weed infestations; and (3) costs to control and/or prevent the noxious weeds.

Further, noxious weeds can negatively affect livestock and dairy producers by making forage either unpalatable or toxic to livestock, thus decreasing livestock productivity and potentially increasing producers' feed costs and animal health care costs. Increased costs to operators are eventually borne by consumers.

Noxious weeds also affect recreational uses, and reduces realty values of both the directly influenced properties and adjacent properties.

Recent federal legislation has been enacted requiring state and county agencies to implement noxious weed control programs. Monies would be made available for these activities from the federal government, generated from the federal tax base. Therefore, all citizens and tax payers of the United States are directly affected when noxious weed control prevention is not exercised.

3. Soils/Floodplain: In general, the floodplain soils in the project area are Vinton-Glendale Association (VG) occurring on the Pecos River floodplain, subject to occasional flooding, slow runoff and moderate hazard of water erosion. Glendale loam (Gf) on second bottoms of the floodplain are rarely flooded, slow runoff, slight hazard of erosion. And Glendale fine sandy loam (Ge), a deep, well-drained soil formed in stratified alluvium on floodplains, rarely or occasionally flooded, medium runoff and slight hazard of water erosion.

Upland soils in the project area are Balmorhea loam (Ba), poorly drained, rarely flooded soils west of the floodplain, runoff slow, hazard of erosion slight. Reakor loam, 1 to 3 percent slopes (ReB), uplands west of the river, runoff medium, hazard of water erosion moderate and hazard of soil blowing slight.

For in depth soil information, please refer to the Soil Survey of Chaves County New Mexico, Southern Part, published by the Natural Resource Conservation Service (NRCS). A copy of this publication may be reviewed at the BLM Roswell Field Office or at a local NRCS office.

4. Cave/Karst: The habitat protection zone is within a designated area of high potential for the occurrence of caves and karst. Karst terrain may consist of numerous sinkholes, disappearing streams and underground drainage systems. In karst areas, erosional processes, which would normally act on the surface, are concentrated below ground.

Although a complete inventory of significant cave and karst features has not been completed for BLM lands, significant cave and karst features are known to exist within the HPZ.

5. Water Quality: Ground water near the ACEC generally moves to the southeast, and eventually reemerges as flow in the river. The water table ranges from 25 to 100 feet below the surface as classified by the New Mexico Water Quality Control Commission.

6. Air Quality: Air quality is rated as a Class II area for the Prevention of Significant Deterioration of air quality as defined in the federal Clean Air Act. Class II areas allow a moderate amount of air quality degradation within the standards of the State of New Mexico and the Federal Air Standards. Prevailing winds in the area is out of the southwest throughout the year. There are no communities within 50 miles of the direction the prevailing winds carry, therefore, all smoke and dust would be dissipated before reaching any communities.

7. Wildlife: The ACEC provides a variety of habitat types for terrestrial and aquatic wildlife species. The diversity and abundance of wildlife species in the area is due to the presence of open water at the adjacent BLNWR and mixture of grassland habitat and mixed desert shrub vegetation.

Numerous avian species use the Pecos River corridor during spring and fall migration, including nongame migratory birds. The Bitter Lake National Wildlife Refuge is directly north from the ACEC, and serves as a major focal point for migratory birds (e.g., ducks, geese, sandhill cranes, waterbirds). Common bird species are mourning dove, mockingbird, white-crowned sparrow, black-throated sparrow, blue grosbeak, northern oriole, western meadowlark, Crissal thrasher, western kingbird, northern flicker, common nighthawk, loggerhead shrike, and roadrunner. Raptors include northern harrier, Swainson's hawk, American kestrel, and occasionally golden eagle and ferruginous hawk.

Common mammal species using the area include mule deer, pronghorn antelope, coyote, gray fox, bobcat, striped skunk, porcupine, racoon, badger, jackrabbit, cottontail, white-footed mouse, deer mouse, grasshopper mouse, kangaroo rat, spotted ground squirrel, and woodrat.

A variety of herptiles also occur in the area such as yellow mud turtle, box turtle, eastern fence lizard, side-blotched lizard, horned lizard, whiptail, hognose snake, coachwhip, gopher snake, rattlesnake, and spadefoot toad.

8. Threatened or Endangered Species: The only known resident population of threatened or endangered species in the proposed project area is the Pecos bluntnose shiner. The status and presence of this and other species of concern are discussed in the following section.

Pecos Bluntnose Shiner (*Notropis simus pecosensis*) - Federal Threatened

Historically, the Pecos bluntnose shiner inhabited the Pecos River from Santa Rosa to near Carlsbad, New Mexico. Currently, the subspecies is restricted to the river from the Fort Sumner area southward locally to the vicinity of Artesia, and seasonally in Brantley

Reservoir (NMDGF 1988; USFWS 1992). Routine fish community monitoring conducted by the USFWS in the Pecos River between Sumner Dam and Brantley Reservoir show the fish remains generally abundant, especially in light of cooperative efforts between the Bureau of Reclamation and the USFWS to more closely mimic natural flows in the Pecos River.

There are two designated critical habitat areas on the Pecos River within the RFO area. The first is a 64-mile reach beginning about ten miles south of Fort Sumner, downstream to a point about twelve miles south of the DeBaca/Chaves county line. The second reach is from Highway 31 east of Hagerman, south to Highway 82 east of Artesia. Neither the Proposed Action nor Alternative A are within the designated critical habitat.

Loss or alteration of habitat (periodic dewatering), and introduction of non-native fish species of the Pecos River (Arkansas River shiner) are the key threats to the Pecos bluntnose shiner. The primary threat to the Pecos bluntnose shiner appears to be artificial manipulation of flows in the Pecos River to meet irrigation needs and subsequent drying of the river channel (NMDGF 1996). High flows in the late winter-early spring before natural spring runoff appear to displace fish into marginal downstream habitats (including Brantley Reservoir). Cessation of reservoir releases after spring runoff, before the advent of summer rains, desiccates long stretches of the Pecos River. Maintenance of water levels within the Pecos River and its tributaries is beyond the management authority of the BLM.

In addition to the manipulation of flows is the threat posed by non-native fish. The introduction and establishment of species such as the Arkansas River shiner offers direct competition with the Pecos bluntnose shiner.

Fish communities between Sumner Dam and Brantley Reservoir are monitored by the FWS in coordination with the BLM and Bureau of Reclamation. Monitoring indicates a general abundance of fish, especially in light of cooperative efforts to maintain more natural flows in the Pecos River.

Pecos (Puzzle) Sunflower (*Helianthus paradoxus*) - Federal Threatened

The Pecos sunflower is found along alkaline seeps and cienegas of semi-desert grasslands and short-grass plains (4,000-7,500 ft.). Plant populations are found both in water and where the water table is near the ground surface.

In the RFO area, the sunflower is found in only a few areas outside of the BLNWR. In 1994, a new population was found growing on the margins of Lea Lake and its outflow at Bottomless Lakes State Park. Lloyd's Draw, east of the Pecos River, has the only known Pecos sunflower population on BLM land, which only became evident following a prescribed fire. Potential habitat also occurs on BLM land within the Overflow Wetlands Wildlife Habitat Area.

Potential habitat for the sunflower occurs on the ACEC as low-lying areas where the water table is near the ground surface. The low-lying areas are not necessarily along the existing river channel, but in old channel courses and oxbows. These areas are now invaded by saltcedar growing in dense stands, which may prevent the viability of the

Pecos sunflower. Other potential sites include a few springs on the east side of the river. No naturally occurring Pecos sunflower populations have been found on the ACEC to date. In 2000, an experimental population was planted by the New Mexico State Land Office on state land in the vicinity of a new sinkhole.

9. Visual Resources/Recreation: The ACEC is located within a Class IV Visual Resource Management area. This means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, the changes should repeat the basic elements of the landscape. Since the ACEC has no facility-based recreational activities, only dispersed recreational opportunities occur on these lands. Recreational activities that occur include hunting, sightseeing, and hiking. Physical access to public lands located in this portion of the ACEC are through private lands. BLM has an easement across private land to access this portion of the ACEC. Off Highway Vehicle designation for public lands within the ACEC are classified as "Limited" to existing roads and trails.

IV. ENVIRONMENTAL IMPACTS

A. Impacts of the Proposed Action

1. Range: There would be no impact to livestock operations as there are no BLM-authorized permits or leases to graze public land in the project area.

2. Vegetation/Riparian: Vegetation treatments would have beneficial and adverse effects on terrestrial vegetation within the project area. Densities of salt cedar would be significantly lowered within the Pecos River riparian community. Non-target vegetation, primarily grasses, would be crushed by the excavator while traversing the area and individual plants uprooted in the immediate site of salt cedar extrication. Vegetation would be crushed by piled and windrowed salt cedar. Most of these impacts would be mitigated by the time of year that the project would be conducted, at the end of the growing season.

By reducing the salt cedar component, herbaceous species would gain in densities after adequate precipitation occurs. Herbaceous species tend to have abundant seed which germinate and mature more rapidly than woody species or succulents. Disturbed sites would revegetate quickly.

All vegetation in the vicinity of brush piles would be temporarily negatively impacted after burning. The herbaceous species would respond within one growing season, and with adequate precipitation, to a level exceeding pre-burning levels. During the burn operation, surrounding vegetation would be consumed by fire, but would quickly recover except in a few areas that may burn hot and sterilize the soil. Forbs would likely dominate these sites first, and after a few growing seasons, grass over as well.

The change in composition of the vegetative community would have the effect of changing the area of treatment from a salt cedar-infested river streambank and floodplain to a more open floodplain within a grassland habitat type in a relatively short period of time (approximately two to three years).

Noxious Weeds - The movement of equipment to and from the site may unintentionally contribute to the establishment and spread of noxious weeds. Noxious weed seeds could be carried onto the project areas by equipment and transport vehicles. The main mechanism for seed dispersion is by equipment and vehicles that were previously used and or driven across or through noxious weed-infested areas. The potential for the dissemination of invasive and noxious weed seeds may be elevated by the use of equipment typically contracted out to different geographic areas in the region. Washing and decontaminating the equipment prior to transporting the equipment onto the construction areas would minimize this impact.

Impacts by noxious weeds will be minimized due to requirements for the company to eradicate the weeds upon discovery. Multiple applications may be required to effectively control the identified populations.

3. Soils/Floodplain: Short term negative impacts to the soil are anticipated from the mechanical clearing of salt cedar by the excavator. Soil along the traveled route of the excavator would be compacted to a degree due to the weight of the machinery. Five pounds per square inch is the exerted pressure by the treads. This is a relatively light “footprint”. Weight is spread over a large area versus the contact patch of a tire. In addition, the grousers are shallow and do not penetrate the surface as deep. Upland soils would be subject to some degree of compaction and soil disturbance would occur at the specific point of salt cedar extraction.

Soils should stabilize after vegetation once again regenerates in the disturbed areas. Short term negative impacts from burning will occur until re-growth stabilizes the soils, especially under salt cedar piles and windrows that burn hot, sterilizing the soil. Burns would be designed to not burn hot and during a time of day and year when burning conditions are favorable for cool burns. Long term positive impacts are expected to benefit the soil from an increased herbaceous vegetation cover. The increased organic material from salt cedar needles, stems and roots, subsequent ash from burning, and by the increased production of grasses and forbs would improve the fertility of the soils. This increase in organic material will also help prevent the erosion hazard of soil blowing. Increased cover is expected to also increase water infiltration rates and moisture holding ability.

Floodplain soils adjacent to the river channel would be impacted by the extrication of salt cedar by the removal of root systems that stabilize the banks. Most of the soils are depositional and have no structure to mix or disrupt. During the time of year that the project is done, flooding is not expected to occur to potential wash soil away. Most of the soil in the immediate floodplain is sandy and would not be affected by compaction from the excavator. Second tier floodplain soils would not be impacted by extraction but would be subject to some surface disturbance and compaction from salt cedar piles and windrows. No horizons would be disrupted.

4. Cave/Karst: The proposed action would not affect cave/karst resources.

5. Water Quality: Short term impacts may occur after a relatively heavy precipitation event that produces high flow in the river. Loose soil and ash may be washed downstream and eventually deposited as material on a point bar. Some soil erosion could occur if flow is high and above bank full stage. After vegetation has re-

established, surface water quantity and quality may increase due to the eradication of salt cedar and better protection of the soil by herbaceous vegetation cover. No negative impact on water quality is expected.

6. Air Quality: During the extrication process, some dust and soil may be carried by wind but is not expected to impact air quality. Air quality will suffer short term decreases on burn days and for a few days following burning. No long-term impacts due to smoke accumulation are anticipated. The smoke dispersal area is unpopulated rangeland and smoke will disperse rapidly with the wind.

7. Wildlife: Removal of salt cedar from the riparian community would also remove the vertical structure of vegetation currently found along the river. This would likely affect bird species seeking cover and perches while traversing through the area either yearlong or seasonally. Closed in streambanks along the Pecos River is likely to be favorable to certain animal species and unfavorable to others. The change in vertical structural diversity may have an effect on mostly avian wildlife populations.

Mechanical treatment would have a temporary effect on all wildlife species in the area due to noise and physical removal of vegetation. Negative impacts would be lessened since the period of treatment avoids the bird nesting season and other critical seasons when loss of cover would be critical to wildlife; for example, during critical reproductive periods (from April to June).

Impact to wildlife would naturally be short term following the prescribed burn. As with any fire, whether natural or man caused, some mortality of small animals, reptiles and birds would occur, especially if they seek salt cedar piles as cover. In most cases, wildlife would be displaced in the short term by the fire and the loss of surrounding vegetation and then would return when vegetation begins to grow back. Some piles would be left as habitat to mitigate the loss of vertical structure which adds to habitat diversity.

After treatment of salt cedar, the increase of forb and grass species would most likely lead to an increase in use of the treated areas by wildlife species that prefer a grassland type, such as mule deer and pronghorn antelope, and certain avian species.

8. Threatened and Endangered Species: There would be no direct effect to listed and proposed species or their habitat as they do not occur within the proposed project area. An indirect and long term effect may be an increase of groundwater availability to the Pecos River. This would be an immeasurable result but possible nonetheless as the reduction of salt cedar and improvement of range condition would improve the subwatershed condition within the ACEC. Because of the potential beneficial impact to T/E species, a determination of May Affect But Not Likely To Adversely Affect is made for all listed species.

9. Visual Resources/Recreation: Salt cedar is a non-native species that has invaded many plant communities in the west to a point where it is part of the landscape, although unnatural when considering that it has invaded grassland habitat and riparian habitat to the exclusion of native plant communities. Removing the vertical structure of salt cedar would not change the color and texture of the original, natural character of the landscape. In the long term (in excess of one year following each treatment) increased

lush plant growth and diversity would tend to change the visual character of the area in a positive manner. In addition, there would be no impact to recreation uses in the area by the removal of salt cedar.

B. Impacts of the Alternatives

1. No Action - This alternative would not significantly change the present conditions. The area would primarily remain in a status quo condition with the Pecos River riparian area dominated by salt cedar. Salt cedar would increase in density within the grassland community. Wildlife populations would remain unchanged under this alternative. No increase of forage, stabilization of the soils, or increase in water infiltration would occur.

C. Mitigation Measures and Residual Impacts

Impacts to the following resources and values would not be mitigated under any alternative and are considered to be residual impacts:

- Short-term change in chemical composition of the uppermost soils layers due to the change in abundance of organic matter.
- Long-term change in percentage of already occurring wildlife species.
- Long-term change in vegetative composition within the treated area.
- The RFO Wildlife Biologist has determined that the amount of land left untreated in the vicinity of the project will adequately serve the needs of the short-term disruption in the wildlife use of the area.

No additional mitigating measures would be needed if the standard operating procedures and design features previously discussed are adhered to. No additional mitigating measures would be needed as long as the prescribed burns stay within the parameters set forth in the Proposed Action and Burn Plan.

D. Cumulative Impacts

Any cumulative impact of the proposed treatment of target vegetation on wildlife would be dissipated by the condition of the surrounding treated areas outside of the proposed project area. Wildlife would be utilizing the different areas at varying levels of use for feeding, protection, cover and reproduction.

V. PERSONS OR AGENCIES CONSULTED

The following are people who have been consulted for their comments in regards to the proposed action. The comments and suggestions expressed during the consultation have been incorporated into this EA.

Helen Miller, Rangeland Management Specialist
Roswell Field Office, BLM

Pat Flannery, Archaeologist
Roswell Field Office, BLM

Michael McGee, Hydrologist
Roswell Field Office, BLM

Allan Wyngaert, Fuels Management
Roswell Field Office, BLM

Rick Evans & Pete Thompson, Boss Reclamation
Ruidoso, NM

